CLAIMS

What is claimed is:

1. A heat transfer system for use on a spacecraft having heat dissipating apparatus, the system comprising:

a heat source disposed on the spacecraft at a location that is remote from heat dissipating apparatus; and

a loop heat pipe thermally coupled between the heat source and the heat dissipating apparatus for coupling heat generated by the heat source to the heat dissipating apparatus.

2. The spacecraft radiator system recited in Claim 1 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.

3. A spacecraft comprising:

heat dissipating apparatus for radiating heat into space;

a heat source disposed at a location that is remote from heat dissipating apparatus; and

a loop heat pipe thermally coupled between the heat source and the heat dissipating apparatus for coupling heat generated by the heat source to the heat dissipating apparatus.

4. The spacecraft recited in Claim 2 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.

5. A heat dissipation method for use on a spacecraft comprising the steps of:

disposing a heat source on a spacecraft at a location that is remote from heat dissipating apparatus;

thermally coupling a loop heat pipe between the heat source and the heat dissipating apparatus; and

coupling heat generated by the heat source to the heat dissipating apparatus by way of the loop heat pipe.

6. The method recited in Claim 5 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.